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The Heavy Feeding of Milk Cows is Now Profitable

BY H. A. ROSS, ASSOCIATE IN DAIRY ECONOMICS

The present prices for butter fat make possible a practical method of disposing of farm crops at prices very much above their present market value. Good cows of the type described below are returning 85 cents a bushel for corn, $24 a ton for hay, and $9.50 a ton for silage, on the basis of 35-cent butter fat.

These values, compared with market prices of hay and corn, seem high, but a recently completed study by the Department of Dairy Husbandry shows that they are obtainable. Individual feed records of 528 cows were compiled. These cows had an average daily production of 25 pounds of 4 percent milk for the six winter months of November, December, January, February, March, and April. The feed consumed during the period was as follows:

Feed consumed by 528 Cows producing 92,095 pounds of butter fat during the six winter months

	Total feed consumed by 528 cows	Feed consumed per cow	Feed consumed per pound of butter fat produced
	lbs.	*lbs.*	*lbs.*
Concentrates	893,688	1,693	9.7
Hay	831,954	1,576	9.0
Silage	2,229,314	4,222	24.2

These cows varied as to size, breed, production, and time of freshening but were typical of the good cows found thruout the butter-fat regions of Illinois. A similar group of cows consuming the same kind and amount of feed should produce an equal amount of butter fat.

If the concentrates in the ration consist of two parts corn and one part bran, and if the hay which is fed is a legume, the result is a well-balanced and economical ration. With the bran in the above ration costing $18 a ton, cows like these studied will return for corn, hay, and silage, the prices shown by the following figures:

Approximate Prices returned for Corn, Hay, and Silage by cows producing an average of 25 pounds of 4 percent milk daily and consuming the amounts of feed shown above

	Butter fat at 30c per lb.	Butter fat at 35c per lb.	Butter fat at 40c per lb.
Return for bushel of corn	$ .70	$ .85	$ .95
Return for ton of hay	20.50	24.00	28.00
Return for ton of silage	8.00	9.50	11.00

In calculating the value of these farm crops when marketed as butter fat, the same relation has been maintained between them as obtains between their present farm values.

The data take account of feed costs only, neglecting alike the incidental expenses of dairying and the value of the skim milk left on the farm. Slightly more labor will be required if production is increased by heavier feeding, but few farmers will object to a little extra work if they can sell their crops, thru the cows, at the prices indicated.

Amount to Feed

It is the sole purpose of this circular to point out that heavy feeding for increased production is profitable under *existing conditions*. The advisability of purchasing more cows is dependent upon many factors other than the price of butter fat, and this method of increasing production is not here considered. With butter fat and feed prices at their present levels, however, it appears advisable to feed for maximum production. The grain ration should be increased as long as there is a corresponding increase in the milk flow without a marked gain in the body weight of the cow. If no increased production results from heavier feeding, the grain ration should be reduced only to that point where lighter feeding would decrease the milk flow.

The Ration Should Consist of Cheap Feeds and be Well Balanced

If silage is available, the suggested ration of bran, corn, silage, and a legume hay, is both cheap and good. In central and northern Illinois, alfalfa, clover, or soybean hay will serve as the legume, while in southern Illinois cowpea hay is an excellent leguminous roughage. Where a legume hay is not available, the ration can well be supplemented by linseed oil meal, the amount ranging from three-fourths of a pound to a pound per cow per day depending upon the amount of milk produced.